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15  
16 **UNITED STATES DISTRICT COURT**  
17 **NORTHERN DISTRICT OF CALIFORNIA**  
18 **SAN FRANCISCO DIVISION**

19 UNITED STATES OF AMERICA,

20 Plaintiff,

21 v.

22 ROWLAND MARCUS ANDRADE,

23 Defendant.  
24

Case No. 3:2-cr-00249-RS

**DEFENDANT'S RULE 16(b)(1)(C)(iii)  
DISCLOSURES REGARDING EXPERT  
DR. SWATI KANORIA**

Judge: Hon. Richard Seeborg, Chief Judge

25 Mr. Andrade hereby discloses, pursuant to Federal Rule of Criminal Procedure 16(b)(1)(iii)  
26 and Federal Rule of Evidence 702, that it may proffer Dr. Swati Kanoria as an expert witness at trial.<sup>1</sup>

27 <sup>1</sup> Need for this testimony depends on the outcome of Mr. Andrade's motion to exclude evidence of alleged market manipulation.  
28

1 Dr. Kanoria's testimony will be based on her experience, education, training, and  
2 research, which render her an expert in market making and market manipulation in  
3 cryptocurrency and traditional securities and commodities markets. Dr. Kanoria's CV has been  
4 provided to the government. Since 2019, Dr. Kanoria has been employed at Charles River  
5 Associates ("CRA"), a global consulting firm headquartered in Boston, MA, where she is  
6 currently an Associate Principal in the Finance Practice. She has performed extensive research  
7 and review regarding market making and market manipulation in cryptocurrency markets during  
8 the charged timeframe. In addition, she has experience performing trading, price, market, and  
9 other high-frequency data analysis in matters involving allegations of market manipulation.

10 Dr. Kanoria also has experience in blockchain transaction tracing and damages analyses  
11 concerning digital assets. At CRA, Dr. Kanoria has led a blockchain data collection initiative to  
12 automate the collection of on-chain data for digital assets. She has also written articles on  
13 cryptocurrency topics and conducted training on cryptocurrency topics for CRA's Finance  
14 Practice. Dr. Kanoria has a certification from The Wharton School on the Economics of  
15 Blockchain and Digital Assets. She has a Ph.D. in Finance from the University of Warwick in  
16 the United Kingdom. Her publications are outlined within her CV. Dr. Kanoria has not  
17 previously testified at trial as an expert witness.

18 At trial, Dr. Kanoria will educate the jury about market making in traditional securities  
19 exchanges. She will explain the rules and obligations of market makers in traditional securities  
20 exchanges and that she did not identify similar rules for cryptocurrency trading platforms. She  
21 will educate the jury about methods of inflating the volume and price of assets on cryptocurrency  
22 trading platforms. Dr. Kanoria will discuss evidence that during the charged timeframe, some  
23 cryptocurrency trading platforms charged listing fees. She will also explain potential motivating  
24 factors for cryptocurrency trading platforms to inflate trading volumes. She will discuss research  
25 studies which found that inflated volume was prevalent on cryptocurrency trading platforms  
26 during the charged timeframe.

27 Dr. Kanoria will explain that market makers facilitate the trading of assets (such as  
28

1 stocks) by providing liquidity. Traditional securities exchanges, such as the New York Stock  
2 Exchange and Nasdaq, typically require market maker participation to successfully maintain  
3 liquidity. In traditional securities exchanges, market makers provide liquidity by buying and  
4 selling at publicly quoted prices. Market makers typically benefit in this process by profiting  
5 from the difference between the bid (buy) and ask (sell) prices, known as the “spread.”

6 Dr. Kanoria will explain how market makers in traditional securities exchanges were  
7 subject to exchange specific rules and obligations.<sup>2</sup> She will explain that she did not identify  
8 similar market making rules for cryptocurrency trading platforms.

9 Dr. Kanoria will explain that there are ways to inflate an asset’s trading volume on  
10 cryptocurrency trading platforms. One way to inflate the trading volume of an asset is through a  
11 practice called wash trading. As Dr. Kanoria will explain, this is a process whereby a trader (or  
12 associated traders) executes trades with itself which creates an illusion of heightened trading  
13 activity. She will also explain that there are other methods of inflating trading volume on  
14 cryptocurrency trading platforms, such as trade mining.<sup>3</sup> Dr. Kanoria will also explain common  
15 methods used to inflate the price of assets on cryptocurrency trading platforms.

16 Dr. Kanoria will explain evidence that during the charged timeframe some  
17 cryptocurrency trading platforms charged fees for listing cryptocurrencies for trading (“listing  
18 fees”).<sup>4</sup> She will also discuss evidence that the possibility of earning listing fees may be a  
19 motivating factor for cryptocurrency trading platforms to inflate trading volume.<sup>5</sup> She will  
20 further discuss that getting a higher rank on ranking tables of cryptocurrency data aggregators,  
21 such as CoinMarketCap, may be another motivating factor for cryptocurrency trading platforms  
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23 <sup>2</sup> For example, see, <https://listingcenter.nasdaq.com/rulebook/nasdaq/rules/nasdaq-equity-2>. See, also,  
24 [https://www.nyse.com/publicdocs/nyse/markets/nyse/NYSE\\_Exchanges\\_Market\\_Maker\\_Orientation.pdf](https://www.nyse.com/publicdocs/nyse/markets/nyse/NYSE_Exchanges_Market_Maker_Orientation.pdf).

25 <sup>3</sup> For example, see, Camila Russo and Benjamin Robertson, “Crypto’s Open Secret: Its Multibillion-Dollar Volume  
Is Suspect,” Bloomberg, September 26, 2018.

26 <sup>4</sup> For example, see, Stevan Plavšić, “How to List a Token and Where — Differences Between CEX and DEX,”  
Medium, March 29, 2019.

27 <sup>5</sup> For example, see, Matthew Hougan, Hong Kim, and Micah Lerner, “Economic and Non-Economic Trading In  
Bitcoin: Exploring the Real Spot Market For The World’s First Digital Commodity,” Bitwise Asset Management,  
28 May 24, 2019.

1 to inflate volume.<sup>6</sup> CoinMarketCap is a website that displays financial metrics for various  
2 cryptocurrencies, as well as data on the trading volume of cryptocurrency trading platforms.<sup>7</sup>

3 In the context of the foregoing, Dr. Kanoria will discuss studies which found that, during  
4 the charged timeframe, inflated trading volumes were prevalent on cryptocurrency trading  
5 platforms. For example, Dr. Kanoria will explain the results of a 2019 study by Hougan et al<sup>8</sup>  
6 which shows that 73 out of the 83 cryptocurrency exchanges that the study analyzed did not pass  
7 one or more of the tests that the study used to identify exchanges with inflated volume. HitBTC,  
8 LBank, and Idax, are included in the 73 exchanges. The study found that in April 2019, roughly  
9 95% of reported average daily spot bitcoin volume on data aggregator CoinMarketCap was  
10 “fake.”

11 As another example, Dr. Kanoria will also discuss the results of a study by Cong et.al<sup>9</sup>  
12 which analyzed data for 29 cryptocurrency exchanges and focused on four cryptocurrencies  
13 (Bitcoin, Ethereum, Litecoin and Ripple) from July 9, 2019 to November 3, 2019. The study  
14 classified 26 of the 29 exchanges as unregulated and found that “[o]n average, wash trades  
15 account for over 70% of the total trading volume on each unregulated exchange.” HitBTC and  
16 LBank are included in the 26 exchanges.

17 Overall, the studies found that inflated trading volume and wash trading was prevalent on  
18 numerous cryptocurrency trading platforms.

19 To assist her testimony, Dr. Kanoria may use demonstratives generally reflective of the  
20 foregoing content. The defense will provide a copy of the demonstratives to the government  
21 prior to trial.

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23  
24 <sup>6</sup> For example, see, Matthew Hougan, Hong Kim, and Micah Lerner, “Economic and Non-Economic Trading In  
Bitcoin: Exploring the Real Spot Market For The World’s First Digital Commodity,” Bitwise Asset Management,  
May 24, 2019.

25 <sup>7</sup> See: <https://coinmarketcap.com/>.

26 <sup>8</sup> Matthew Hougan, Hong Kim, and Micah Lerner, “Economic and Non-Economic Trading In Bitcoin: Exploring the  
Real Spot Market For The World’s First Digital Commodity,” Bitwise Asset Management, May 24, 2019.

27 <sup>9</sup> Lin William Cong, Xi Li, Ke Tang, and Yang Yang, “Crypto Wash Trading,” July 2023 (first draft: November  
28 2019).

/s/ Swati Kanoria

Swati Kanoria  
Associate Principal  
Charles River Associates

Respectfully submitted,

DATED: January 10, 2025

KING &amp; SPALDING LLP

By: /s/ Michael J. Shepard

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